

Work Order ID 67225

Friday, March 11, 2011 11:41:29 AM



Page 1

Item ID: D350-591-122

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, RH

Start Date: 3/11/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 3/18/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date: 11-03-11

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2351

E

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and type labels as per PPP D350-591-122 CHG005

Sub 63131

OK Per BG 11/03/31

110

0.00



Large Fab

11-03-14

Large Fab

Memo

0.00

Large Fab

1-Cut D2244-116 extrusion to 55.32" long as per Dwg D2351 using cutting table setup DT8185-G
2-Drill extrusion per Dwg D2351 using Jig DT8230 for rivets.

2

130

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Bend as per dwg D2351-042 using cnc bender and Folio FT 012. Use bend prog. D2351-042.

DP 11-3-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Cust Item ID:

Required Date: 3/18/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8 ulos/r

(x2)

150

Large Fab

0.00



Large Fab

Memo

0.00

Large Fab

1-Bevel Fwd and Aft end for welding
2-Weld Aft End Bracket per QSI 004 & Dwg D2351 using Welding Jig DT8033
A/RAluminum Rod m115928
3-Do not Grind Flush

11.03.28

2

/

160

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

2

0

DEC/03/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Cust Item ID:

Required Date: 3/18/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

QC5- Inspect part completeness to step on W/O

0.00



0.00 8/10/28

QC

Memo

Quality Control



180

Chemical Conversion Coat per QSI005 4.1

0.00

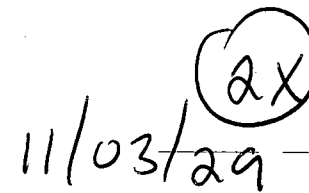


0.00 7m. 1

HandFinish

Memo

Hand Finishing



190

QC3- Inspect Part Finish

0.00



0.00

QC

Memo

Quality Control

2 BR 11-3-29.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Cust Item ID:

Required Date: 3/18/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200		0.00							
	Large Fab								
Large Fab	Memo	0.00							
Large Fab	1-Rivet Leg Assembly as per Dwg D2351								
210		0.00							
	QC5- Inspect part completeness to step on W/Q	0.00							
QC	Memo	0.00							
Quality Control									
220		0.00							
	Large Fab								
Large Fab	Memo	0.00							
Large Fab	1-Weld Fwd End Plate per QSI 004 & Dwg D2351								
	A/RAluminum Rod <i>m114703</i>								
	2-Grind end plate flush. <i>m115928</i>								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Start Date: 3/11/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 3/18/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

225

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Sub 130

230

~~QC5~~ Inspect visual per QSI004- Fusion Welds

0.00



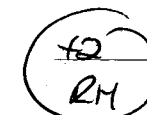
QC

Memo

0.00

Quality Control

Sub 130



PNO →

250

Chemical Conversion Coat per QSI005 4.1

0.00

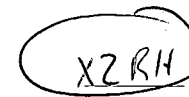


HandFinish

Memo

0.00

Hand Finishing



φ

Sub 130

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11/03/30	* 130	change step 6 QC 10 inspection					S 11/03/30

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Start Date: 3/11/2011 Start Qty: 2.00

Required Date: 3/18/2011 Req'd Qty: 2.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

260 White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum 0.00



Powdercoat

Powder Coating

Memo

START TIME:

3:20

FINISH TIME:

OVEN TEMPERATURE:

1:55

0.00

2 BL 11-3-30

270 Wing Walk as per dwg QSI005 4.4 Batch 1116402 0.00



HandFinish

Hand Finishing

Memo

0.00

X2RH 11/03/31

280 QC3- Inspect Part Finish 0.00



QC

Quality Control

Memo

0.00

11/3/31 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Work Order ID 67225

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Item ID: D350-591-122

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, RH

Start Date: 3/11/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 3/18/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
290 Packaging Packaging	Pick Kit Memo	0.00 0.00						4/3/31	(2)
300 QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.00							(2) PRC
310 Packaging Packaging	Packaging Memo	0.00 0.00						11/3/31	20 SP

Identify and pack for shipping as per PPP D350-591-122

Location: 80

PPP Rev: 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Item ID: D350-591-122

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Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, RH

Start Date: 3/11/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 3/18/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

320

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

OK 11/04/01

MF

11-04-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Friday, March 11, 2011 11:41:35 AM

Work Order ID: 67225

Parent Item: D350-591-122





Parent Item Name: Heli-Access-Step, RH

Start Date: 3/11/2011**Required Date:** 3/18/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:E02.10.21Re-format; Incorporated D2351-041 IPPKJ/RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2244-116  Step Extrusion		Manufactured	No			110	Each	104.0000	0.5	1		11.03.14	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				104					
					57850			27					
					60307			77					
D2850-2  End Cap		Manufactured	No			150	Each	8.0000	1	2		11.03.28	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				8					
					47114			8					
D2582  Step Leg Assembly		Manufactured	No			200	Each	16.0000	1	2		11.03.29	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				16					
					53634			5					
					61677			1					
					62053			10					
MS20600-AD4W3  Cherry Rivets		Purchased	No			200	Each	1,275.000	16	32		11.03.29	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST321				1275					
					107939			752					
					111636			523					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Work Order ID: 67225

Parent Item: D350-591-122



Parent Item Name: Heli-Access-Step, RH

Start Date: 3/11/2011

Required Date: 3/18/2011



Start Qty: 2.00

Required Qty: 2.00

D2673-34 Manufactured No 220 Each 144.0000 1 2

 End Plate
 11.03.29



Location Loc Qty Loc Code

WA 144
 57527 1
 59690 143

AN3-37A Purchased No 290 Each 650.0000 2 2

 Bolt
 2
2



Location Loc Qty Loc Code

ST353 650
 105425 150
 111668 500

AN4-13A Purchased No 290 Each 586.0000 3 6

 Bolt
 105425
3 6

Location Loc Qty Loc Code

ST357 586
 116786 286
 117094 300

AN960JD10 NAS1149D0363J Purchased No 290 Each 24.0000 4 8

 Washer
 116786
4 8
116583 24/3/31@

Location Loc Qty Loc Code

ST298 24
 105792 2
 107715 6
 112279 16

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Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Work Order ID: 67225

Parent Item: D350-591-122

Parent Item Name: Heli-Access-Step, RH

Start Date: 3/11/2011

Required Date: 3/18/2011

Start Qty: 2.00

Required Qty: 2.00

AN960JD416

NAS1149D0463J

Purchased

No

290

Each

30.0000

12



Washer

Location

Loc Qty

Loc Code

ST300

24

113288

24

ST356

6

115622

6

Manufactured

No

290

Each

84.0000

D2230-1



Lug

Location

Loc Qty

Loc Code

ST476

84

65270

84

Manufactured

No

290

Each

12.0000

D2230-3



Lug

Location

Loc Qty

Loc Code

Return 2010

4

62927

2

63544

2

ST476

8

55452

2

66126

6

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item Name: Heli-Access-Step, RH

Start Date: 3/11/2011

Required Date: 3/18/2011

Start Qty: 2.00

Required Qty: 2.00

D2856-400

Manufactured No

290 f

146.2980 0.6 1.2



Abraison Strip

Location

Loc Qty

Loc Code

ST403

146.2980421

56626

0.00004211

59920

43.381

63735

102.917

63735

cut (1) at 7.20"

MS21042L3

Purchased No

290 Each

2,364.000



Nut

Location

Loc Qty

Loc Code

ST300

2364

116391

764

116540

800

116549

800

116391

MS21042L4

Purchased No

290 Each

4,370.000



Nut

Location

Loc Qty

Loc Code

ST300

4370

1123143

2

115589

10

115621

20

116188

2338

116823

2000

116188

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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Parent Item: D350-591-122

Parent Item Name: Heli-Access-Step, RH

Start Date: 3/11/2011

Required Date: 3/18/2011

Start Qty: 2.00

Required Qty: 2.00

D2732-030

02732

Manufactured No

290 Each

18.0000

2 4



Rubber Cushion



64283

[Handwritten signature]

4x3=12

Location

Loc Qty

Loc Code

ST409

18

65395

18

Purchased No

290 Each

100.0000

2 4



Bolt



6/13/31 @

Location

Loc Qty

Loc Code

ST358

100

116400

100

116900

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Page 5

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN KE	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D2351	REV. E SHEET 1 OF 2
DATE 05.11.14		TITLE HIGH FLOAT STEP ASSEMBLY	SCALE NTS
A	95.02.15	NEW ISSUE	
B	97.05.22	END CAPS CHANGED	
C	97.07.23	ADDED BUSHING AND FACING INFO	
D	98.12.17	CHANGED TO BEND, D2850 REPLACES D2357 & D2358, INCORP. DEO 9084	
E	05.11.14	UPDATE FINISHING NOTE	

D2351 HIGH FLOAT STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY -041	QTY -042
D2351-041	High Float Step Assembly (LH)	X	
D2351-042	High Float Step Assembly (RH)		X
D2244-55.4	STEP EXTRUSION*	1	1
D2582	STEP LEG ASSEMBLY	1	1
D2673-34	STEP END PLATE	1	1
D2850-1	END BRACKET	1	
D2850-2	END BRACKET		1
MS20600AD4W3	RIVETS	16	16

*cut per drawing

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK IN PROGRESS
NO. 67-225
P/11-03-11

RELEASED
05.11.28

PH
ECN 1105
UNDER REVIEW
07.11.29
P/11-03-11

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

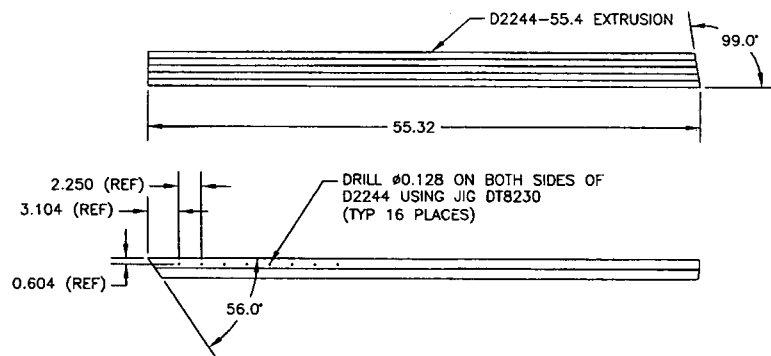
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

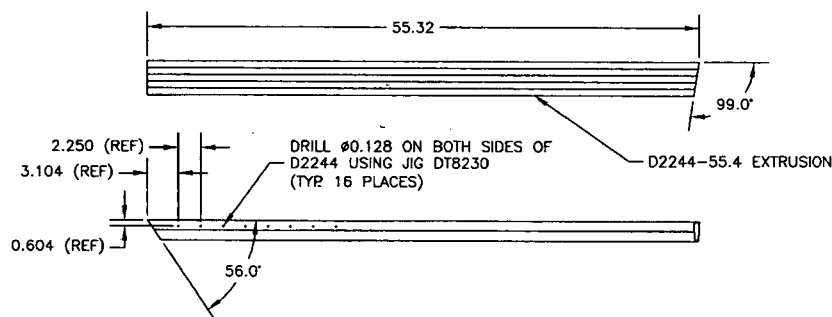
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

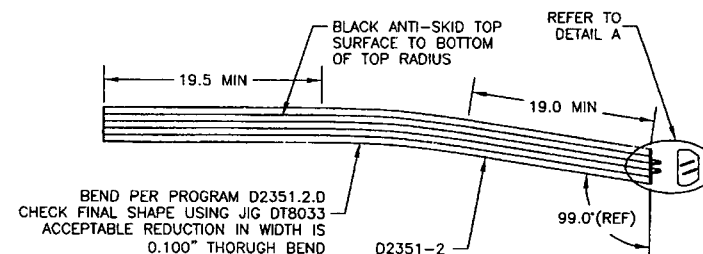
D2351-2 CUTTING/DRILLING DETAIL
RIGHT STEP



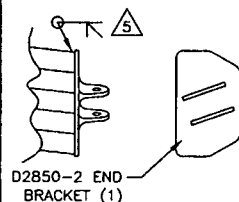
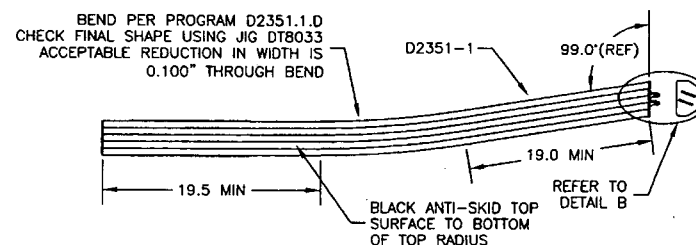
D2351-1 CUTTING/DRILLING DETAIL
LEFT STEP



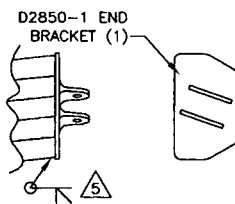
D2351-042 BENDING/ASSEMBLY DETAIL
RIGHT STEP



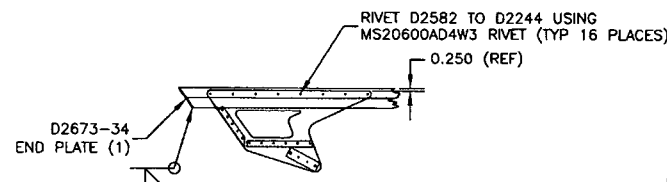
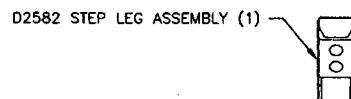
D2351-041 BENDING/ASSEMBLY DETAIL
LEFT STEP



DETAIL A
SCALE: 1:4



DETAIL B
SCALE: 1:4



GENERAL NOTES

- 1) WELD PER DART QSI 004
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

CHAMFER D2244 EXTRUSION 0.075"x45" BEFORE WELDING D2850-1 OR D2850-2 IN PLACE. DO NOT GRIND FLUSH.

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DESIGN	DRAWN BY	DART	DART AEROSPACE LTD.
KE	PH		
CHECKED	APPROVED		
DATE	TITLE	DRAWING NO.	REV. E
05.11.14	HIGH FLOAT STEP ASSEMBLY	D2351	SHEET 2 OF 2
			SCALE
			1:12

RELEASED
05.11.28

UNDER REVIEW

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

5. PARTS LIST

Qty -111A	Qty -113	Qty -115	Qty -117A	Qty -119	Qty -133	Part Number	Description
X						D350-591-111A	<i>Heli-Access-Step</i> ™, Long Step – High Skid
	X					D350-591-113	<i>Heli-Access-Step</i> ™, Short Step – High Skid
		X				D350-591-115	<i>Heli-Access-Step</i> ™, Short Step – Low Skid
			X			D350-591-117A	<i>Heli-Access-Step</i> ™, Pre-Flight Step
				X		D350-591-119	<i>Heli-Access-Step</i> ™, Long Step – Low Skid
					X	D350-591-133	<i>Heli-Access-Step</i> ™, Aft Maintenance Step
	1					D2310	STEP ASSEMBLY (HIGH-SHORT)
1						D2311	STEP ASSEMBLY (HIGH-LONG)
		1				D2354	STEP ASSEMBLY (LOW-SHORT)
				1		D2355	STEP ASSEMBLY (LOW-LONG)
					1	D2946-041	STEP ASSEMBLY (MAINTENANCE)
4	2	2	2	2		D2171	CLAMP
4	2	2	2	2		D2182B035	CUSHION
					4	D2230-1	MOUNTING LUG
					4	D2230-3	MOUNTING LUG
8	4	4	4	4		D2274	RADIUS BLOCK
			1			D2362-041	SUPPORT BRACKET
2	1			1		D2362-3	SUPPORT BRACKET
		1				D2362-5	SUPPORT BRACKET
2	1	1	1	1	2	D2856-400-720	ABRASION STRIP
					1	D2945	MOUNTING PLATE
2	2	2		2		AN3-37A	BOLT
					2	AN4-7A	BOLT
					4	AN4-11A	BOLT
					8	AN4-14A	BOLT
		4				AN4-16A	BOLT
8	4			4		AN4-20A	BOLT
1	1	1	4	1		AN4-22A	BOLT
4	4	4		4		AN960JD10	WASHER
10	6	2	4	6	14	AN960JD416	WASHER
		4				AN960JD416L	WASHER
2	2	2		2		MS21042L3	NUT
9	5	5	4	5	14	MS21042L4	NUT

Qty -121	Qty -122	Qty -123	Qty -124	Part Number	Description
X	X			D350-591-121	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
				D350-591-122	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
		X		D350-591-123	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
			X	D350-591-124	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
1				D2351-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1			D2351-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1		D2356-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1	D2356-042	STEP ASSEMBLY (LOW-SHORT, RH)
1	1	1	1	D2230-1	MOUNTING LUG
1	1	1	1	D2230-3	MOUNTING LUG
1	1	1	1	D2856-400-720	ABRASION STRIP
2	2	2	2	AN3-37A	BOLT
3	3	3	3	AN4-13A	BOLT
4	4	4	4	AN960JD10	WASHER
6	6	6	6	AN960JD416	WASHER
2	2	2	2	MS21042L3	NUT
3	3	3	3	MS21042L4	NUT

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Revision: G

Date: 08.10.06

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER
REF CANADIAN STC: SH92-6
REF FAA STC: SH967NE

REFERENCE ONLY

For D350-591-121/-122/-123/-124/-133 steps, customers have the option of installing D2732-030 cushions under the D2230-1/-3 clamps to accommodate varying crosstube diameters and to improve fit. It is also acceptable to use longer or shorter AN4 bolts, and/or extra AN960JD416 washers under the nut to ensure 1.5 to 4 threads in safety. See Figure 1 on sheet 2 of this service instruction for reference.

For D350-591-121/-122 steps at CHG 005, D350-591-123/-124 steps at CHG 004, and D350-591-133 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -121	Qty -122	Qty -123	Qty -124	Qty -133	Part Number	Description
X					D350-591-121	Heli-Access-Step™, Short Step – High Skid, LH
	X				D350-591-122	Heli-Access-Step™, Short Step – High Skid, RH
		X			D350-591-123	Heli-Access-Step™, Short Step – Low Skid, LH
			X		D350-591-124	Heli-Access-Step™, Short Step – Low Skid, RH
				X	D350-591-133	Heli-Access-Step™, Aft Maintenance Step
2	2	2	2	8	D2732-030	CUSHION
2	2	2	2	8	AN4-16A	BOLT

The DSI-9459-011 kit is available for customers with earlier model D350-591-121/-122/-123/-124 steps. Longer AN4 bolts are provided to fasten the clamps. The DSI-9459-013 kit is available for customers with earlier model D350-591-133 steps.

Qty -011	Qty -013	Part Number	Description
X		DSI-9459-011	Rubber Cushion Kit (for -121/-122/-123/-124 steps)
	X	DSI-9459-013	Rubber Cushion Kit (for -133 steps)
2	8	D2732-030	CUSHION
2	8	AN4-16A	BOLT

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: D. SHEPHERD (DE # 02)

DATE: 09.06.24

CERT. NO.: SH92-6

ISSUE NO.: 11

B	AN4-16A WAS -17A FOR -013/-133 KIT	CP	09.06.24
A	NEW ISSUE	CP	09.04.17
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		DSI 9459	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		OPTIONAL CLAMP MODIFICATIONS	NTS
DATE	09.06.24	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
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